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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/599,551	03/22/2007	Michael W. Leonard	S9025.1179	1621

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NEW YORK, NY 10036-2714

EXAMINER
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TREIDL, JESSICA I

ART UNIT	PAPER NUMBER
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1796

MAIL DATE	DELIVERY MODE
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05/28/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/599,551	LEONARD ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	JESSICA TREIDL	1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 09/29/2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-20 and 22-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 and 22-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>09/29/2006</u> .  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Information Disclosure Statement***

The information disclosure statement filed 09/29/2006 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each cited foreign patent document; each non-patent literature publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. The information disclosure statement does not provide a copy of foreign reference WO 2005/016654. It has been placed in the application file, but reference WO 2005/016654 referred to therein has not been considered.

### ***Oath/Declaration***

The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because:  
Non-initialed and/or non-dated alterations have been made to the oath or declaration. See 37 CFR 1.52(c).

### ***Specification***

The use of the trademarks/tradenames, such as Ebecryl 648, Esacure ITX and Lucerin TPO, has been noted in this application. They should be capitalized wherever they appear and be accompanied by the generic terminology.

Although the use of trademarks/tradenames is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks/tradenames.

### ***Claim Objections***

Claim 17 is objected to because the compound “bis(2,6-dimethoxybenzoyl)-2,4,4-rimethylpentylphosphine oxide” is unclear and appears to be a typo of “bis(2,6-dimethoxybenzoyl)-2,4,4-trimethylpentylphosphine oxide”. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 5 and 24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 5 recites the limitation "R\*" in the second line. There is insufficient antecedent basis for this limitation in the claim. For the purpose of this action, R\* will be interpreted to mean R<sup>1</sup>, R<sup>2</sup> or R<sup>3</sup>.

Claim 24 recites the limitation "R\*" in the first line. There is insufficient antecedent basis for this limitation in the claim. For the purpose of this action, R\* will be interpreted to mean R<sup>1</sup>, R<sup>2</sup> or R<sup>3</sup>.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-8 and 24 are rejected under 35 U.S.C. 102(b) as being anticipated by Schmidt (WO 2003/035777), see English language equivalent (Schmidt US 2005/0142292).

Regarding claim 1, Schmidt teaches curable inks for intaglio printing initiated by actinic radiation (Abstract, Title, [0001]), comprising polymerizable acrylates ([0026]) and a radical forming photoinitiator being a phosphine oxide ([0045]). Regarding the limitation drawn to the fluorescence of the ink in the visible light region when exposed to ultraviolet light, although the reference does not explicitly teach the fluorescence of the ink, the ink composition does not contain any compounds that fluoresce in the visible light region when exposed to ultraviolet light (see Table 5, Ex. No. 4). Furthermore, the Office realizes that all the claimed effects or physical properties are not positively stated by the reference. However, the reference teaches all of the claimed reagents.

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Therefore, the claimed effects and physical properties, i.e. no fluorescence in the visible light wavelength region when exposed to ultraviolet light, would inherently be achieved by a composition with all the claimed ingredients. If it is the applicants' position that this would not be the case: (1) evidence would need to be presented to support applicant's position; and (2) it would be the Office's position that the application contains inadequate disclosure that there is no teaching as to how to obtain the claimed properties and effects with only the claimed ingredients.

Regarding claims 2-8 and 24, Schmidt teaches 2,4,6-trimethylbenzoyl diphenylphosphine oxide or bis(2,4,6-trimethylbenzoyl) phenylphosphine oxide, as the photoinitiator ([0045]).

Claims 9-17 and 22-23 are rejected under 35 U.S.C. 102(b) as being anticipated by Schmidt (WO 2003/035777), see English language equivalent (Schmidt US 2005/0142292).

Regarding claims 9 and 10, Schmidt teaches a method of intaglio printing on a film ([0059]), wherein the ink is initiated by actinic radiation (Abstract, Title, [0001]), comprising polymerizable acrylates ([0026]) and a radical photoinitiator being a phosphine oxide ([0045]) and is UV cured after printing ([0059]).

Regarding claims 11-17, 22 and 23, Schmidt teaches the method wherein 2,4,6-trimethylbenzoyl diphenylphosphine oxide or bis(2,4,6-trimethylbenzoyl) phenylphosphine oxide, is the photoinitiator ([0045]).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 18-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schmidt (WO 2003/035777), see English language equivalent (Schmidt US 2005/0142292), as applied to claim 9 above, and in view of Veya et al (US 2004/0029989).

Regarding claims 18 and 19, Schmidt teaches the basic claimed method [as set forth above with respect to claim 9] printed onto plastic films [0059].

Schmidt does not teach the printing method wherein the substrate is paper or the document produced is a security document [instant claims 18 & 19]. However, Veya et

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al disclose a UV curable intaglio printing ink (Title) wherein the ink contains a radical forming photoinitiator ([0043]) and polymerizable acrylates ([0024]-[0025]). Furthermore the reference teaches that "security documents are printed preferably by the intaglio printing process", wherein it is printed on paper ([0001]-[0004]). Schmidt and Veya et al are combinable because they are concerned with similar technical difficulty, namely UV curable intaglio printing inks. At the time of invention a person of ordinary skill in the art would have found it obvious to produce security documents on paper, as taught by Veya et al, using the UV curable intaglio printing method of Schmidt and would have been motivated to do so in lieu of its common and preferable use evidenced by Veya et al.

Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schmidt (WO 2003/035777), see English language equivalent Schmidt US 2005/0142292, in view of Veya et al (US 2004/0029989), as applied to claim 19 above, and further in view of Ghioghiu et al (WO 2001/38445).

Regarding claim 20, Schmidt and Veya et al render the basic claimed method obvious [as set forth above with respect to claim 19].

Schmidt does not teach the printing method wherein the security document produced is a banknote [instant claim 20]. However, Ghioghiu et al disclose a UV curable intaglio printing ink (Abstract) wherein the ink contains a radical forming photoinitiator (P7/L8 see Irgacure 184) and polymerizable acrylates (P5/L10-15). Furthermore the reference teaches that the intaglio printing technique is well-known,



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produces high quality raised images and can be used to make banknotes (P1/L13-15). Schmidt and Ghioghiu et al are combinable because they are concerned with a similar technical difficulty, namely UV curable intaglio printing inks. At the time of the invention a person of ordinary skill in the art would have found it obvious to produce banknotes, as taught by Ghioghiu et al, using the UV curable intaglio printing method of Schmidt and would have been motivated to do so in lieu of its common use and the attributes of intaglio printing disclosed by Ghioghiu et al.

### ***Correspondence***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JESSICA TREIDL whose telephone number is (571)270-3993. The examiner can normally be reached on Monday- Thursday, 7:30AM- 5PM EST, Alt. Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Eashoo can be reached on (571) 272-1197. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/MARK EASHOO/  
Supervisory Patent Examiner, Art Unit 1796  
25-May-08

/J.T./  
/5.15.08/